

**REMARKS**

The Office Action objects to the sequence listing which was filed with this patent application in view of a number of perceived informalities in the computer readable form thereof. As suggested in the Office Action, enclosed herewith is a replacement sequence listing and computer readable form. In addition, please find enclosed herewith a Statement to Support Filing and Submission of DNA/Amino Acid Sequences in Accordance with 37 CFR §§ 1.821 through 1.825. No new matter has been added. The contents of the paper copy of the Sequence Listing and computer readable copy of the Sequence Listing, submitted in accordance with 37 CFR §1.821(c) and (e), are the same.

Claims 1-8 and 11-21, all claims pending in this patent application, stand rejected under 35 U.S.C. § 112, first paragraph, for alleged lack of enablement. Applicants respectfully request reconsideration of this rejection, as there still is no reason of record indicating that those skilled in the art would not be able to practice the claimed inventions. As best understood, the basis for maintaining the rejection for alleged lack of enablement is that the specification does not explicitly recite "synthetic methodology" for all compounds embraced by the claims. (Office Action at page 4). Significantly, however, there is no requirement under the patent laws for explicit synthetic details for each and every claimed compound. All the first paragraph of § 112 requires is that the disclosure of a patent application be such that persons



skilled in the art, having read the patent application, would be able to practice the claimed inventions. *In re Wands*, 8 U.S.P.Q.2d 1400 (Fed. Cir. 1988). There is no legal requirement that this be done in any particular manner. An enabling disclosure can be provided by the use of illustrative examples or simply by broad terminology. *In re Marzocchi*, 169 U.S.P.Q. 367 (C.C.P.A. 1971).<sup>1</sup>

When rejecting a claim under the enablement requirement of § 112, the Patent Office bears the "initial burden of setting forth a reasonable explanation as to why [he/she] believes that the scope of protection provided by [the] claim is not adequately enabled by the description of the invention provided in the specification." *In re Wright*, 27 U.S.P.Q.2d 1510, 1513 (Fed. Cir. 1993). To object to a specification on the grounds that the disclosure is not enabling with respect to the scope of a claim sought to be patented, the Examiner must provide evidence or technical reasoning substantiating those doubts. *Id.*; and M.P.E.P. § 2164.04. Without a reason to doubt the truth of the statements made in the patent application, the application must be considered enabling. *In re Wright*, 27 U.S.P.Q.2d at 1513; *In re Marzocchi*, 169 U.S.P.Q. at 369.

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<sup>1</sup> The Office Action asserts that legal authority for the rejection for alleged lack of enablement is provided by M.P.E.P. §§ 706.03(n) and 706.03(z). Applicants note, however, that neither § 706.03(n) nor § 706.03(z) appear in the July, 1997, revision of the M.P.E.P., which is believed to be the most recent revision of that document.



Significantly, the outstanding Office Action fails to provide any facts indicating a reason to doubt that Applicants' disclosure would enable those skilled in the art to practice the inventions as claimed. In view of this fact, Applicants respectfully request that the rejection for alleged lack of enablement be reconsidered and withdrawn.

Claims 1-8 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by WO 86/05518 ("the Summerton reference"). According to the Office Action, the Summerton reference is relevant for its alleged disclosure at page 48 concerning the use of "nucleobases with sterically bulky groups" (Office Action at page 5). The claimed invention, however, is not directed simply to "nucleobases with sterically bulky groups" but, rather, to nucleic acid mimics in which a base thereof is substituted with a sterically bulky substituent at a position one, two or three atoms removed from the position at which the base attaches to the mimic's backbone. The Summerton reference does not disclose such mimics at page 48 or, for that matter, anywhere else. The Office Action mailed December 3, 1996, asserted that page 21 of the Summerton reference discloses synthetic intermediates which bear bulky protecting groups on nucleosidic bases. Significantly, however, these synthetic intermediates are different from the polymeric compounds which appear to be referenced on page 48. Indeed, the Summerton reference at page 21 specifically teaches that the protecting groups employed are removed "after completion



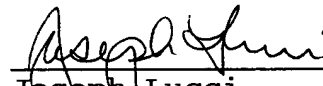
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of polymer assembly." Since the Summerton reference simply does not disclose any nucleic acid mimic according to the invention in admixture with a target molecule, Applicants request that the rejection for alleged anticipation be reconsidered and withdrawn.

In view of the foregoing, Applicants submit that the claims presently before the Examiner patentably define the invention over the applied art and are otherwise in condition for ready allowance. An early Office Action to that effect is, therefore, earnestly solicited.

Respectfully submitted,



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